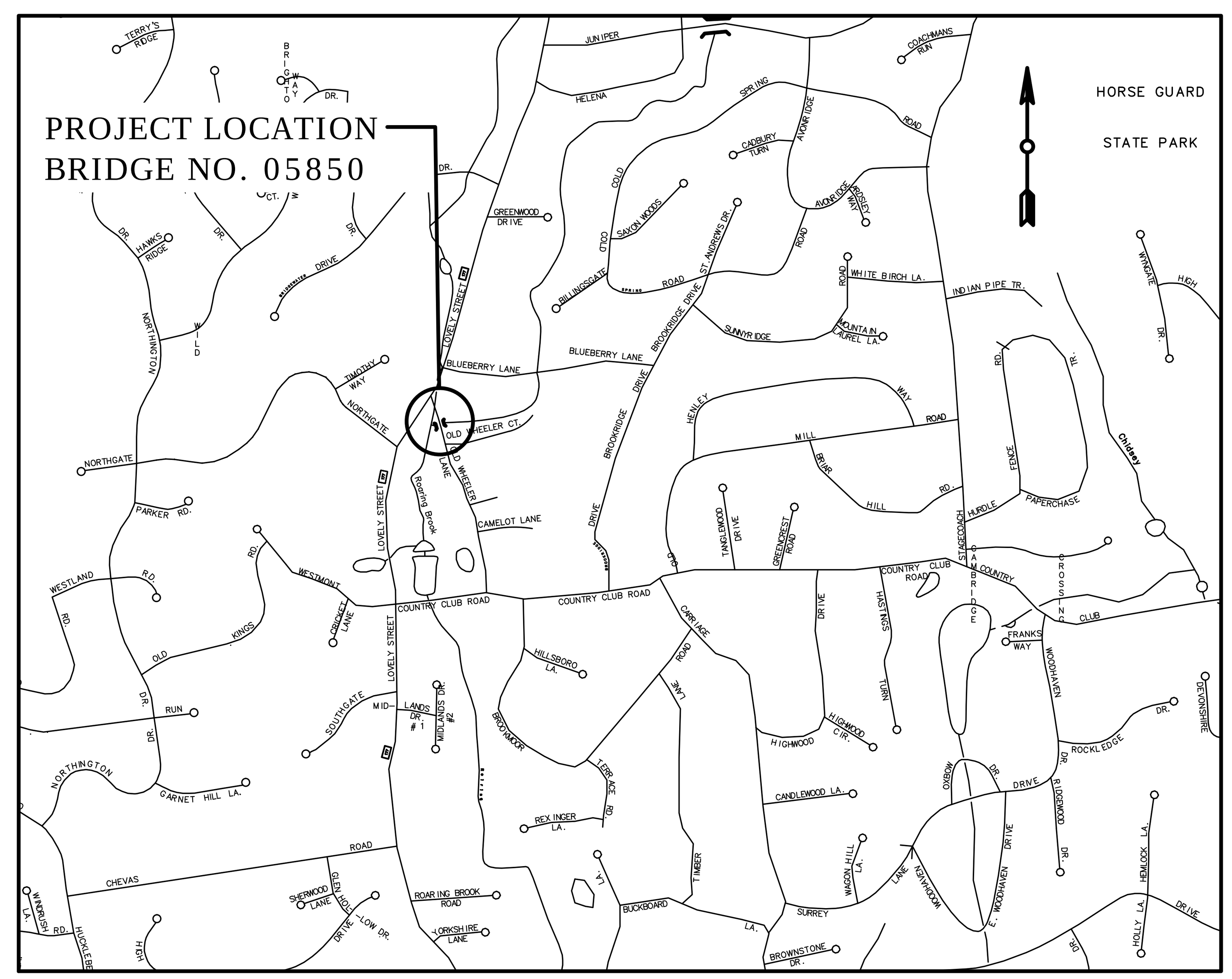
REHABILITATION OF BRIDGE NO. 05850
OLD WHEELER LANE OVER
ROARING BROOK

PREPARED FOR

TOWN OF AVON



LOCATION MAP

NOT TO SCALE

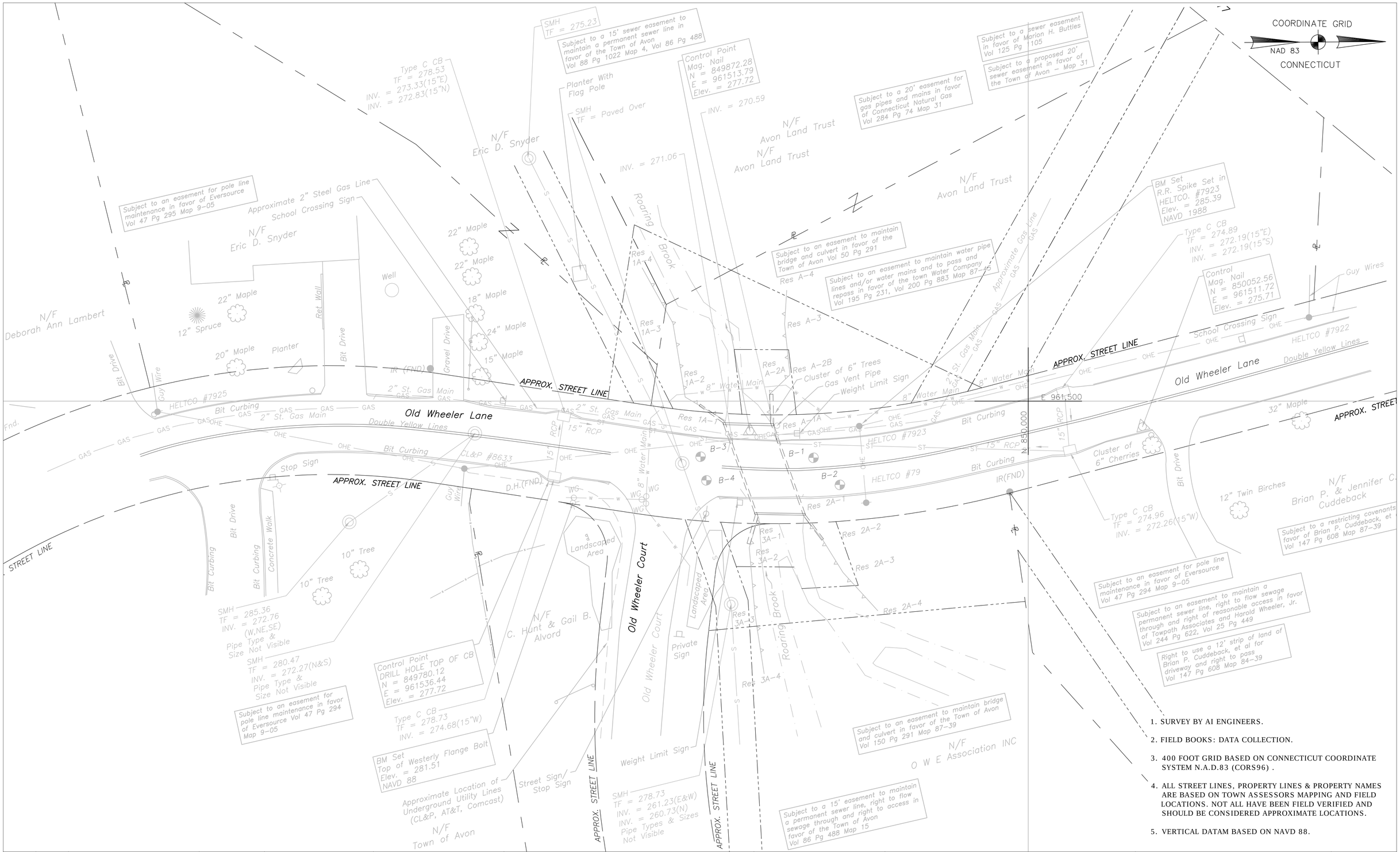
August 2015

SHEET NO.	DESCRIPTION
-	TITLE SHEET
EST-1	DETAILED ESTIMATE
TIE-1	SURVEY AND TIE PLAN
TYP-1	TYPICAL SECTIONS
MDS-1	MISCELLANEOUS DETAILS
MDS-2	SIDEWALK RAMP DETAILS
MDS-3 TO MDS-6	TIMBER GUIDERAIL DETAILS
HWY-1	ROADWAY PLAN
PRO-1	ROADWAY PROFILE
XSC-1	CROSS SECTIONS
S-01	GENERAL PLAN, ELEVATION AND SECTION
S-02	BORING LOGS-1
S-03	BORING LOGS-2
S-04	WATER HANDLING PLAN
S-05	ENDWALL DETAILS
S-06	FRAMING PLAN
S-07	PRESTRESSED BEAM DETAILS
S-08	SIDEWALK AND RAILING PLAN
S-09	MISCELLANEOUS DETAILS
S-10	BRIDGE RAIL DETAILS
S-11	TIMBER RAIL ATTACHMENT
MPT-1	DETOUR PLAN

AI Engineers, Inc.

919 MIDDLE STREET
MIDDLETOWN, CT 06457

100% DESIGN SUBMISSION



1. SURVEY BY AI ENGINEERS.
2. FIELD BOOKS: DATA COLLECTION.
3. 400 FOOT GRID BASED ON CONNECTICUT COORDINATE SYSTEM N.A.D.83 (CORS96) .
4. ALL STREET LINES, PROPERTY LINES & PROPERTY NAMES ARE BASED ON TOWN ASSESSORS MAPPING AND FIELD LOCATIONS. NOT ALL HAVE BEEN FIELD VERIFIED AND SHOULD BE CONSIDERED APPROXIMATE LOCATIONS.
5. VERTICAL DATAM BASED ON NAVD 88.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

PLOTTED DATE: 8/10/2015 2:43 PM

DESIGNER/DRAFTER: MR/SK

CHECKED BY: SG

SCALE IN FEET: 0, 20', 40'

SCALE 1"=20'

ENGINEER:
AI Engineers, Inc.
919 MIDDLE STREET
MIDDLETOWN, CT 06457

FILENAME: TIE-1 SURVEY AND TIE PLAN.DWG

SIGNATURE/ BLOCK:

PROJECT TITLE:
REHABILITATION OF BRIDGE NO. 05850
OLD WHEELER LANE OVER ROARING BROOK

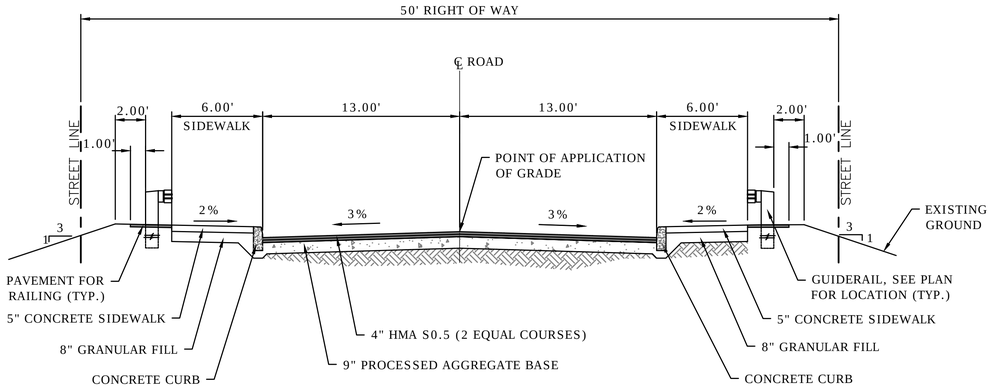
TOWN: AVON

DRAWING TITLE: SURVEY AND TIE PLAN

PROJECT NO. 004-0131

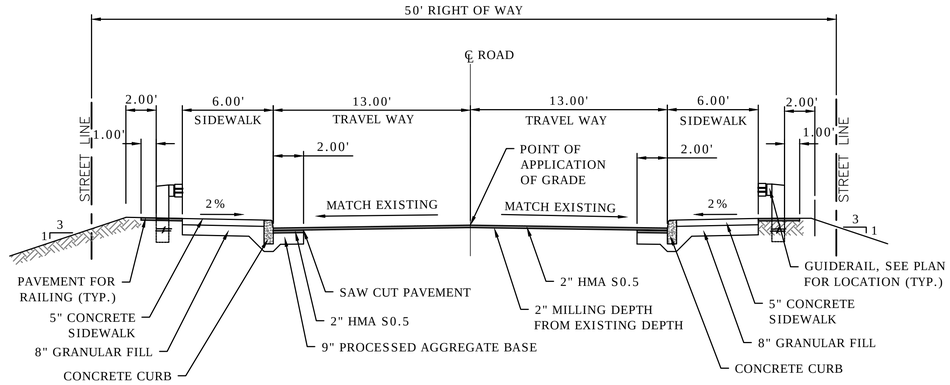
DRAWING NO. TIE-1

SHEET NO.



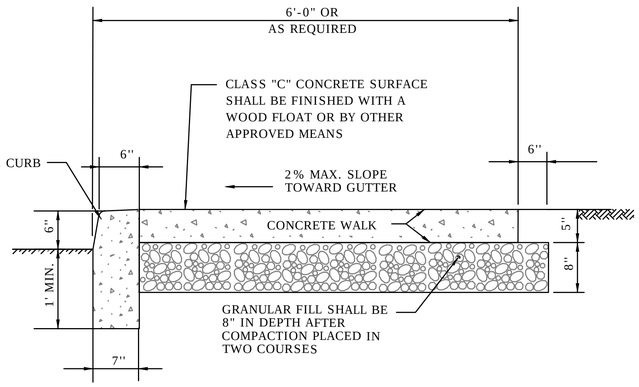
TYPICAL CROSS-SECTION

SCALE: 1" = 5'
STA. 13+20 TO STA. 13+40.62
STA. 13+63.53 TO STA. 13+80



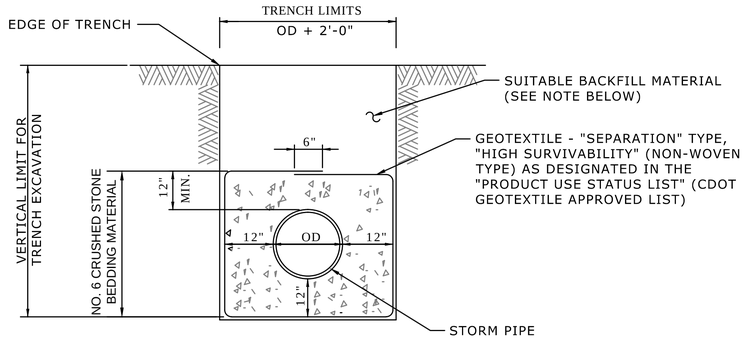
TYPICAL CROSS-SECTION

SCALE: 1" = 5'
STA. 12+65 TO STA. 13+20
STA. 13+80 TO STA. 14+00



CONCRETE SIDEWALK

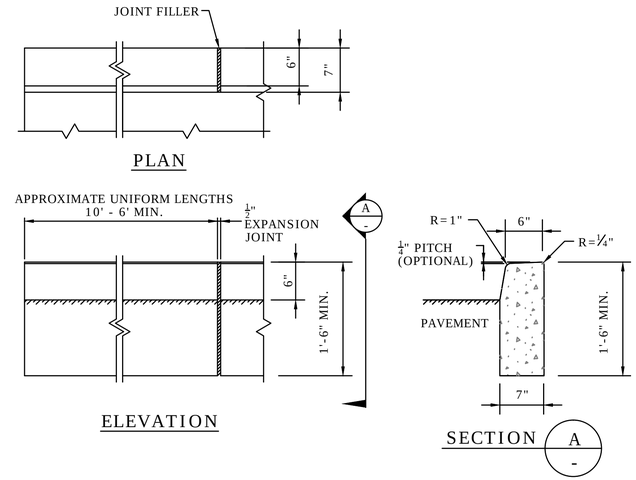
NOT TO SCALE



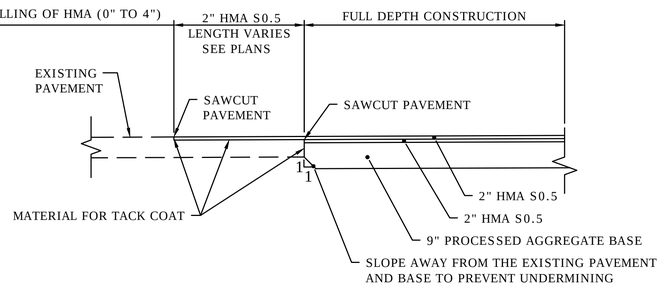
NOTE:

1. SUITABLE BACKFILL MATERIAL SHALL BE ANY MATERIAL EXCAVATED FROM THE RESPECTIVE TRENCH THAT CONFORMS TO THE SPECIFICATIONS. GRANULAR FILL SHOULD BE USED IN THE ABSENCE OF SUITABLE BACKFILL MATERIAL AS DIRECTED BY THE ENGINEER.

TRENCH DETAIL



6" CONCRETE CURBING



PAVEMENT TRANSITIONS

NOT TO SCALE

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

PLOTTED DATE: 8/10/2015 2:42 PM

DESIGNER/DRAFTER: EW/SK
CHECKED BY: SG
SCALE AS NOTED

ENGINEER:
AI Engineers, Inc.
919 MIDDLE STREET
MIDDLETOWN, CT 06457
FILENAME: TYP-1 TYPICAL SECTIONS.DWG

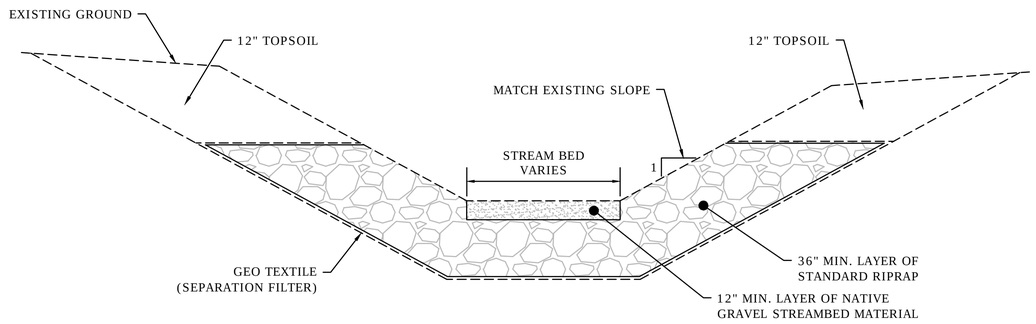
SIGNATURE/ BLOCK:

PROJECT TITLE:
REHABILITATION OF BRIDGE NO. 05850
OLD WHEELER LANE OVER ROARING BROOK

TOWN: AVON

DRAWING TITLE: TYPICAL SECTIONS

PROJECT NO. 004-0131
DRAWING NO. TYP-1
SHEET NO.



TYPICAL SCOUR PROTECTION TREATMENT

NOT TO SCALE

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

PLOTTED DATE: 8/10/2015 2:16 PM

DESIGNER/DRAFTER: EW/SK

CHECKED BY: SG

SCALE AS NOTED

ENGINEER:
AI Engineers, Inc.
919 MIDDLE STREET
MIDDLETOWN, CT 06457

FILENAME: MDS-1 MISC DETAILS.DWG

SIGNATURE/
BLOCK:

PROJECT TITLE:
REHABILITATION OF BRIDGE NO. 05850
OLD WHEELER LANE OVER ROARING BROOK

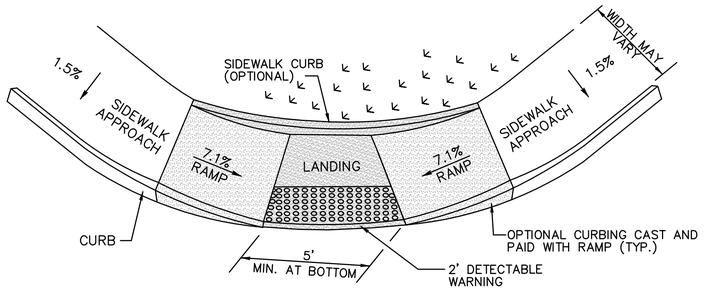
TOWN: AVON

DRAWING TITLE:
MISCELLANEOUS DETAILS

PROJECT NO. 004-0131

DRAWING NO. MDS-1

SHEET NO.

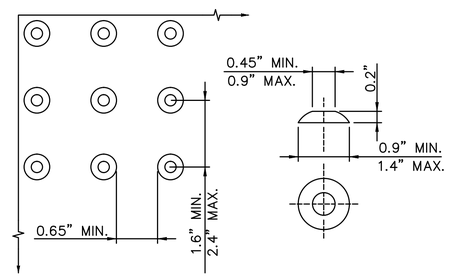


DOUBLE PARALLEL SIDEWALK RAMP W/LANDING AT BOTTOM ON CORNER (TYPE 4f)

*SEE GENERAL NOTE 20

NOTES:

1. RAMPED MEDIANS SHALL HAVE A CURB RAMP AT EITHER END AND LEVEL LANDING A MINIMUM OF 5' x 5' IN BETWEEN. CUT–THROUGH MEDIANS SHALL BE A MINIMUM OF 6' LONG AND 5' WIDE. FOR ALL MEDIANS, CUT–THROUGH OR RAMPED, A 2' STRIP OF DETECTABLE WARNINGS SHALL BE INSTALLED AT THE ENTRANCE AND EXIT.
2. SEE GENERAL NOTES ON THIS DRAWING.

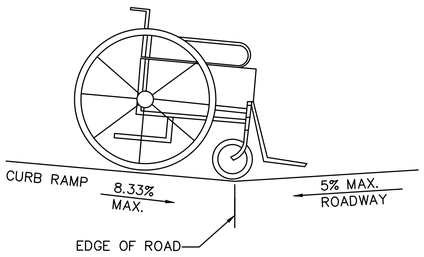


DOME SPACING DOME SECTION

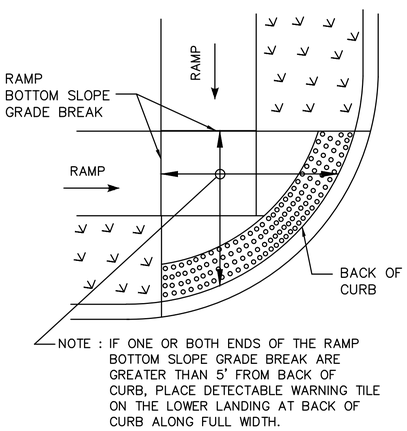
STANDARD DOME ON DETECTABLE WARNING TILES

GENERAL NOTES:

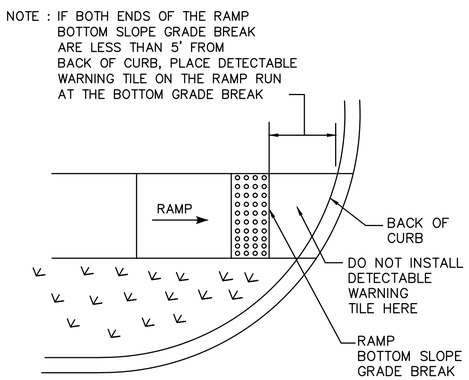
1. MAXIMUM SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE SIDEWALK RAMP SHOULD NOT EXCEED 5%. THE MAXIMUM GRADE DIFFERENCE BETWEEN THE GUTTER AND CURB RAMP SHALL NOT EXCEED 13%. SEE DETAIL 1 ON THIS DRAWING.
2. RAMP GRADE SHALL BE UNIFORM, FREE OF SAGS AND ABRUPT GRADE CHANGES. RUNNING SLOPES OF RAMPS SHALL NOT EXCEED 8.3% AND SHALL NOT EXCEED 15' WITHOUT PROVIDING LANDING.
3. ALL RAMPS SHALL BE CONSTRUCTED OF CLASS "F" CONCRETE IN ACCORDANCE WITH CONNECTICUT STANDARD SPECIFICATIONS.
4. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE OF ALL SIDEWALK RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. SURFACE DISCONTINUITIES SHALL NOT EXCEED $\frac{1}{2}$" MAX. VERTICAL DISCONTINUITIES BETWEEN, $\frac{1}{4}$" AND $\frac{1}{2}$" MAX. SHALL BE BEVELED 1:2 MINIMUM APPLIED ACROSS THE ENTIRE LEVEL CHANGE.
5. DIAGONAL SIDEWALK RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES. DIAGONAL AND PERPENDICULAR RAMPS SHALL HAVE THE RAMP CUT PERPENDICULAR TO THE TANGENT OF THE CURB RADIUS FOR THE DESIGNATED ACCESSIBLE ROUTE. BOTH LONGITUDINAL SIDES OF THE RAMP SHOULD BE THE SAME LENGTH. SKEWED RAMPS SHOULD BE AVOIDED. FLARES ARE NOT CONSIDERED PART OF PEDESTRIAN ACCESS ROUTE. DIAGONAL RAMPS SHOULD NOT BE INSTALLED WHERE CURB RADII IS LESS THAN 20'.
6. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION OR CONTRACTION JOINT. 8.3% MAXIMUM SLOPE MAY NOT BE ACHIEVABLE DUE TO EXISTING SIDEWALK GRADE. IN RECOGNITION OF THIS, A LIMIT OF 15' FOR REMOVAL SHALL BE USED UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER. SAW CUT REQUIRED FOR DUMMY JOINTS SHALL BE INCLUDED IN THE COST OF "CONCRETE SIDEWALK RAMP" OR "CONCRETE SIDEWALK".
7. EXPANSION JOINTS IN CONCRETE SHALL MATCH THOSE IN ADJACENT SIDEWALKS BUT IN NO CASE SHALL THE SPACING BETWEEN EXPANSION JOINTS EXCEED 12' UNLESS OTHERWISE NOTED.
8. CONCRETE SIDEWALK RAMPS, SHALL BE PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK RAMP", AS DEFINED BY THE CONSTRUCTION LIMITS ON THE PLANS AND SHALL BE FIELD VERIFIED.
9. SIDEWALK RAMPS SHALL BE CONSTRUCTED WITH THE TOE AT THE GUTTER CAST INTEGRALLY WITH RAMP UNLESS DIRECTED OTHERWISE BY THE ENGINEER. CURB REMOVAL AND CAST IN PLACE CURBING REQUIRED FOR THE RAMP, SHALL BE INCLUDED WITH PAY ITEM "CONCRETE SIDEWALK RAMP". CURBING OUTSIDE LIMITS OF RAMP OR LANDING SHOWN ON THIS SHEET SHALL BE CONSTRUCTED AND PAID FOR IN ACCORDANCE WITH CONNECTICUT STANDARD SPECIFICATIONS.
10. PREFERRED LOCATION TO INSTALL DETECTABLE WARNING STRIP SHALL BE 6" FROM THE EDGE OF ROAD ALONG THE FULL WIDTH OF THE RAMP. FOR ALTERNATE LOCATIONS, REFER TO DETECTABLE WARNING PLACEMENT DETAILS ON THIS SHEET.
11. TO PERMIT WHEELCHAIR WHEELS TO ROLL BETWEEN DOMES, ALIGN DOMES ON A SQUARE GRID IN THE DIRECTION OF RUNNING SLOPE (PERPENDICULAR TO CURB OR SLOPE BREAK). THE TRANSITION FROM RAMP TO GUTTER SHALL BE FLUSH WITHOUT A LIP.
12. WHERE COMMERCIAL DRIVEWAYS ARE PROVIDED WITH TRAFFIC SIGNALS AND THE SIDEWALK IS CONTINUOUS THROUGH DRIVEWAY, DETECTABLE WARNINGS ARE REQUIRED AT THE JUNCTION BETWEEN THE PEDESTRIAN ROUTE AND DRIVEWAY.
13. CONSTRUCT A SIDEWALK CURB WHEN THERE IS INSUFFICIENT BUFFER AVAILABLE TO GRADE OR WHEN CALLED FOR IN PLANS. PAID FOR WITH SIDEWALK RAMP WHEN REQUIRED FOR RAMP.
14. THE TOP AND BOTTOM OF RAMPS SHOULD BE PROVIDED WITH A 4' x 4' MINIMUM LEVEL LANDING AREA WITH A CROSS SLOPE LESS THAN OR EQUAL TO 2% IN ANY DIRECTION.
15. UTILITY POLES, LUMINAIRE, PEDESTRIAN OR SIGNAL POLES, GRATES, ACCESS COVERS, AND OTHER APPURTENANCES SHALL NOT BE LOCATED ON RAMPS, LANDINGS, BLENDED TRANSITIONS, AND @ GUTTERS WITHIN THE PEDESTRIAN ACCESS ROUTE.
16. APPROACH SIDEWALK WIDTHS, GRASS STRIP OR UTILITY STRIP WIDTHS MAY VARY.
17. APPROACH SIDEWALK AND LANDING CROSS SLOPE SHALL NOT EXCEED 2%.
18. THE RUNNING OR CROSS SLOPES ON LANDINGS AT MID BLOCK CROSSING MAY BE WARPED TO MEET STREET OR HIGHWAY GRADE.
19. FOR PERPENDICULAR CURB RAMPS A MIN. 4'x4' LEVEL LANDING SHALL BE PROVIDED AT THE TOP OF CURB RAMP. WHERE THE LEVEL LANDING IS RESTRICTED AT THE BACK OF SIDEWALK THE LEVEL LANDING SHALL BE 4'x5' WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.
20. FOR PARALLEL CURB RAMPS, A MIN. 4'x4' LEVEL LANDING SHALL BE PROVIDED AT THE BOTTOM OF CURB RAMP. IF THE LEVEL LANDING IS RESTRICTED ON 2 OR MORE SIDES, THE LEVEL LANDING SHALL BE 4'x5' WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.
21. WHEN WIDTH OF SIDEWALK IS >48" AND A PERPENDICULAR SIDEWALK RAMP IS INSTALLED, THE FLARED SIDES SHALL BE 10% MAX. IF WIDTH OF SIDEWALK IS <48" THE FLARED SIDES MUST NOT EXCEED 8.33% (12:1).
22. SHADED AREAS ARE TYPICAL PAY LIMITS FOR CONCRETE SIDEWALK RAMP BUT, MAY VARY AS DIRECTED BY THE ENGINEER.



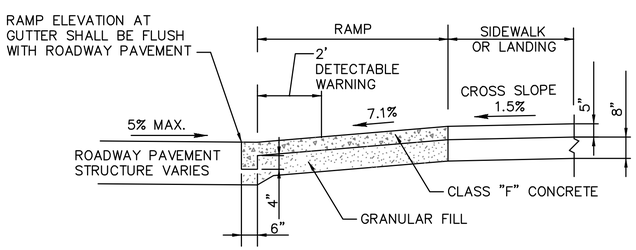
DETAIL-1
SEE GRADE CHANGE AT ROADWAY INTERFACE
SEE GENERAL NOTE 1



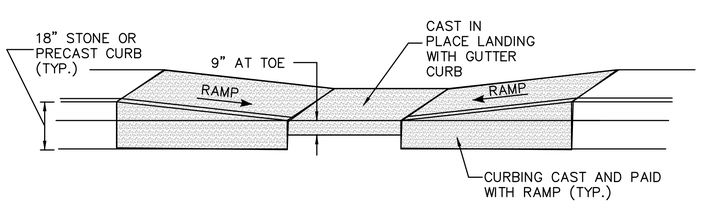
DETAIL-2
DETECTABLE WARNING PLACEMENT



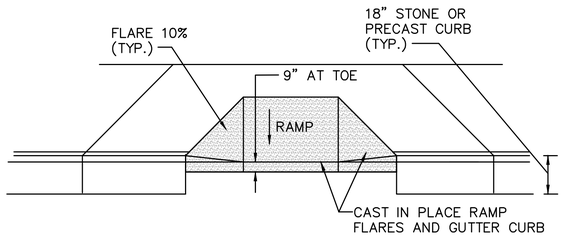
DETAIL-3
DETECTABLE WARNING PLACEMENT



TYPICAL SECTION THRU SIDEWALK RAMP
SEE NOTE 2 AND 17



TYPICAL ELEVATION PARALLEL SIDEWALK RAMP WITH CAST IN PLACE GUTTER



TYPICAL ELEVATION PERPENDICULAR SIDEWALK RAMP WITH CAST IN PLACE GUTTER

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

PLOTTED DATE: 8/10/2015 2:22 PM

DESIGNER/DRAFTER: EW/SK
CHECKED BY: SG
NOT TO SCALE

ENGINEER: AI Engineers, Inc.
919 MIDDLE STREET
MIDDLETOWN, CT 06457
FILENAME: MDS-2 SIDEWALK DETAILS.DWG

SIGNATURE/ BLOCK:

PROJECT TITLE:
REHABILITATION OF BRIDGE NO. 05850
OLD WHEELER LANE OVER ROARING BROOK

TOWN: AVON
DRAWING TITLE: SIDEWALK RAMP DETAILS

PROJECT NO. 004-0131
DRAWING NO. MDS-2
SHEET NO.

BEGIN STATE PROJECT NO. 004-131
STA. 12+65 OLD WHEELER LANE
N 849793.10
E 961522.08
MATCH EXISTING

END STATE PROJECT NO. 004-131
STA. 14+00 OLD WHEELER LANE
N 849926.77
E 961528.90
MATCH EXISTING

COORDINATE GRID
NAD 83
CONNECTICUT

LIMIT OF DEFINED EASEMENT REQUIRED

STA. 13+51.89 OLD WHEELER LANE
N 849878.72
E 961531.15

BEGIN BRIDGE STA. 13+40.08

SEDIMENTATION CONTROL SYSTEM

8'-RELAY 15" RCP

CONCRETE END WALL

STEEL BACKED TIMBER GUIDERAIL -BRIDGE ATTACHMENT

RESET MANHOLE SANITARY SEWER

STA. 13+11.64 OLD WHEELER RD.
STA. 200+00 OLD WHEELER CT.
N 849838.60
E 961528.65

CONCRETE SIDEWALK

APPROX. SLOPE LIMITS (TYP.)

MILL AND OVERLAY

STEEL BACKED TIMBER GUIDERAIL END ANCHORAGE

BEGIN CONCRETE SIDEWALK AND CONCRETE CURBING

PC STA 12+97.51
N 849824.59
E 961526.80

PT STA 14+61.05
N 849986.74
E 961517.76

12" THICK LAYER OF NATURAL STREAMBED MATERIAL ON 36" THICK LAYER OF STANDARD RIPRAP ON GEOTEXTILE (SEPARATION) FILTER

SEDIMENTATION CONTROL SYSTEM (TYP.)

8'-RELAY-15" RCP

CONCRETE END WALL

BRIDGE ENDS STA. 13+63.53

STEEL BACKED TIMBER GUIDERAIL -BRIDGE ATTACHMENT

CONCRETE SIDEWALK

STEEL BACKED TIMBER GUIDERAIL

END CONCRETE SIDEWALK AND CONCRETE CURBING

STEEL BACKED TIMBER GUIDERAIL END ANCHORAGE

CUT BITUMINOUS CONCRETE PAVEMENT

4" DOUBLE YELLOW EPOXY RESIN PAVEMENT MARKINGS

END CONCRETE SIDEWALK AND CONCRETE CURBING

MILL AND OVERLAY

CONCRETE SIDEWALK

STEEL BACKED TIMBER GUIDERAIL -BRIDGE ATTACHMENT

LIMIT OF FULL DEPTH RECONSTRUCTION (TYP.)

CONCRETE END WALL

SEDIMENTATION CONTROL SYSTEM (TYP.)

12" THICK LAYER OF NATURAL STREAMBED MATERIAL ON 36" THICK LAYER OF STANDARD RIPRAP ON GEOTEXTILE (SEPARATION) FILTER

LIMIT OF DEFINED EASEMENT REQUIRED

R=25'

RELOCATE STOP SIGN

CONCRETE SIDEWALK RAMP

CONCRETE ENDWALL

STEEL BACKED TIMBER GUIDERAIL -BRIDGE ATTACHMENT

STEEL BACKED TIMBER GUIDERAIL

BEGIN CONCRETE SIDEWALK AND CONCRETE CURBING

STOP BAR

STEEL BACKED TIMBER GUIDERAIL END ANCHORAGE

BEGIN CONCRETE SIDEWALK AND CONCRETE CURBING

4" DOUBLE YELLOW EPOXY RESIN PAVEMENT MARKINGS

CONCRETE SIDEWALK

R=25'

CONCRETE SIDEWALK RAMP

END CONCRETE SIDEWALK AND CONCRETE CURBING

CUT BITUMINOUS CONCRETE PAVEMENT

END OF CONSTRUCTION STA. 200+42

OLD WHEELER COURT 201+00

CURVE NO. 3

CONSTRUCTION B

PROPERTY ACQUISITION LEGEND

(A)	DEFINED EASEMENT FOR HIGHWAY PURPOSES AND APPURTENANCES REQUIRED.

CONCRETE CURBING		
OLD WHEELER LANE	STA. 12+65 LT. TO STA. 14+00 LT.	
OLD WHEELER LANE	STA. 12+65 RT. TO OLD WHEELER COURT	
OLD WHEELER LANE	OLD WHEELER COURT TO STA. 14+00 RT.	

CURVE NO. 1	CURVE NO. 2	CURVE NO. 3
Δ = 36°-36'-23"	Δ = 23°-25'-32"	Δ = 16°-41'-20"
T = 115.72'	T = 82.93'	T = 90.94'
L = 223.51'	L = 163.54'	L = 180.59'
R = 350.00'	R = 400.00'	R = 620.00'

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

PLOTTED DATE: 8/10/2015 3:57 PM

DESIGNER/DRAFTER: MR/SK
CHECKED BY: SG
SCALE IN FEET 0 20' 40'
SCALE 1"=20'

ENGINEER:
AI Engineers, Inc.
919 MIDDLE STREET
MIDDLETOWN, CT 06457

FILENAME: HWY-1 ROADWAY PLAN.DWG

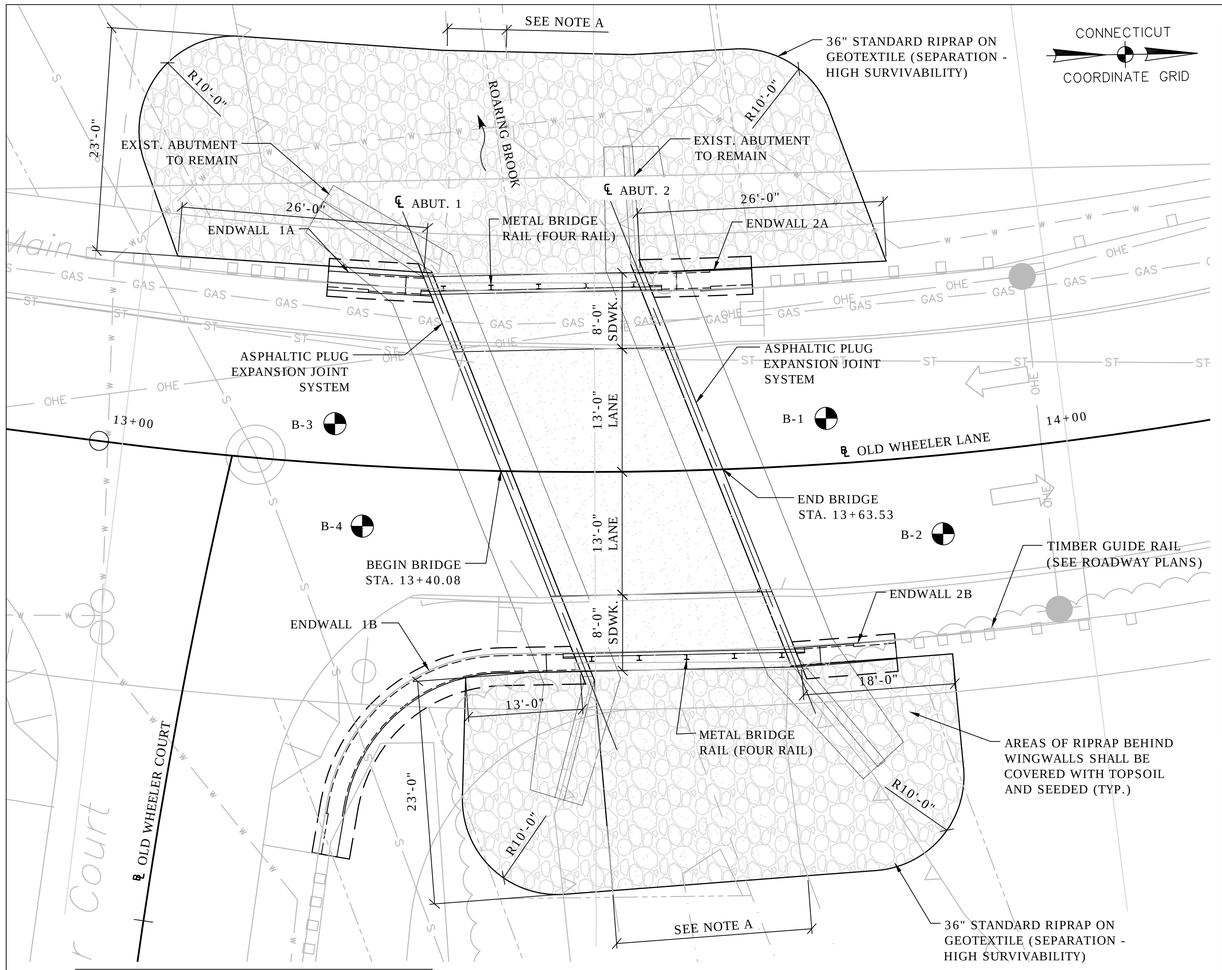
SIGNATURE/ BLOCK:

PROJECT TITLE:
REHABILITATION OF BRIDGE NO. 05850
OLD WHEELER LANE OVER ROARING BROOK

TOWN: AVON

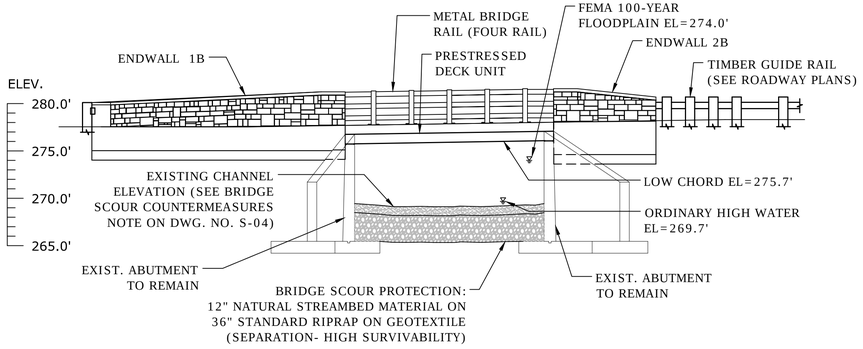
DRAWING TITLE: ROADWAY PLAN

PROJECT NO. 004-0131
DRAWING NO. HWY-1
SHEET NO.

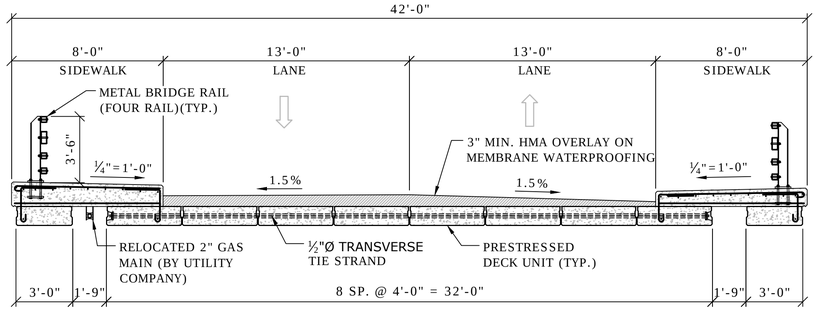


NOTE A:
12' NATURAL STREAMBED MATERIAL TO COINCIDE WITH STREAM LIMITS ON 36" STANDARD RIPRAP ON GEOTEXTILE (SEPERATION - HIGH SURVIVABILITY)

PLAN
SCALE: 1/8" = 1'-0"



ELEVATION
SCALE: 1/8" = 1'-0"



TYPICAL SECTION
SCALE: 1/4" = 1'-0"

BRIDGE QUANTITIES		
ITEM NAME	UNIT	QUANTITY
EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL	CY	76
STRUCTURE EXCAVATION - EARTH (COMPLETE)	CY	143
HANDLING WATER	LS	LS
LIGHTWEIGHT FILL	CY	44
PERVIOUS STRUCTURE BACKFILL	CY	42
HMA S0.5	TON	25
HMA S0.25	TON	4
REMOVAL OF SUPERSTRUCTURE (SITE NO. 1)	LS	LS
POLYVINYL CHLORIDE PLASTIC PIPE WEEPHOLES	EA	2
PRESTRESSED DECK UNITS (3'-0" X 1'-0")	LF	47
PRESTRESSED DECK UNITS (4'-0" X 1'-0")	LF	187
ASPHALTIC PLUG EXPANSION JOINT SYSTEM	CF	47
ELASTOMERIC BEARING PADS	CI	2,880
CLASS "A" CONCRETE	CY	45
CONCRETE FORM LINERS	SF	277
CLASS "F" CONCRETE	CY	15
DEFORMED STEEL BARS	LB	3,097
DEFORMED STEEL BARS - EPOXY COATED	LB	4,615
DRILLING HOLES AND GROUTING DOWELS	EA	40
STANDARD RIPRAP	CY	444
MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC)	SY	75
GEOTEXTILE (SEPARATION-HIGH SURVIVABILITY)	SY	444
METAL BRIDGE RAIL - FOUR RAIL	LF	49
TEMPORARY SUPPORT OF UTILITIES	LS	LS

HYDRAULIC SUMMARY DATA	
DRAINAGE AREA	3.98 SQ.MI.
DESIGN FREQUENCY	100-YEAR
DESIGN DISCHARGE	970 CFS
AVERAGE DAILY FLOW ELEVATION	269.7 FEET (EST)
UPSTREAM DESIGN WATER SURFACE ELEVATION	277 FEET (NAVD 88)
DOWNSTREAM DESIGN WATER SURFACE ELEVATION	273.5 FEET (NAVD 88)
MAXIMUM SCOUR ELEVATION	16.2 FEET (NAVD 88)
FREQUENCY	100-YEAR
DISCHARGE	970 CFS
WORST CASE SCOUR SUB-STRUCTURE UNIT	NORTH ABUTMENT

GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004), SUPPLEMENTAL SPECIFICATIONS DATED JULY 2015 AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, WITH THE INTERIM SPECIFICATIONS UP TO AND INCLUDING THE YEAR 2014, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003).

ALLOWABLE DESIGN STRESSES:
CLASS "A" CONCRETE .....BASED ON f'c = 3000 psi
CLASS "F" CONCRETE .....BASED ON f'c = 4000 psi
PRECAST PRESTRESSED CONCRETE.....BASED ON f'c = 6000 psi

THE SPECIFIED CONCRETE STRENGTHS USED IN DESIGN, f'c, OF THE CONCRETE COMPONENTS ARE NOTED ABOVE. THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF "SECTION 6.01 CONCRETE FOR STRUCTURES."

REINFORCEMENT (ASTM A615, GRADE 60) .....fy = 60,000 psi

LIVE LOAD: AASHTO HL-93

FUTURE PAVING ALLOWANCE: NONE

BITUMINOUS CONCRETE OVERLAY: THIS SHALL CONSIST OF TWO COURSES. THE BOTTOM COURSE SHALL BE HOT MIX ASPHALT (1" HMA S0.25) AND THE TOP COURSE SHALL BE HOT MIX ASPHALT (2" MINIMUM HMA S0.5).

DIMENSIONS: ALL DIMENSIONS SHOWN ON THE PLANS ARE IN FEET AND INCHES EXCEPT IF NOTED OTHERWISE. WHEN ELEVATIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS ARE ASSUMED TO BE ZEROS.

EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM THE ORIGINAL 1964 DESIGN DRAWING, AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, THE FIELD MEASUREMENTS SHALL BE INCLUDED FOR REFERENCE.

CLASS "A" CONCRETE: CLASS "A" CONCRETE SHALL BE USED FOR THE ENTIRE SUBSTRUCTURE.

CLASS "F" CONCRETE: CLASS "F" CONCRETE SHALL BE USED FOR SIDEWALKS.

JOINT SEAL: SEE SPECIAL PROVISIONS.

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" X 1" UNLESS DIMENSIONED OTHERWISE.

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE 2" COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCING SHALL BE ASTM A615 GRADE 60.

EPOXY COATED REINFORCING BARS: ALL REINFORCEMENT IN THE SUPERSTRUCTURE, INCLUDING THE SIDEWALK, SHALL BE EPOXY COATED UNLESS OTHERWISE NOTED. BARS IN THE SIDEWALK SHALL BE INCLUDED IN THE PAY ITEM FOR "DEFORMED STEEL BARS (EPOXY COATED)" AND BARS IN THE PRECAST SLABS SHALL BE INCLUDED IN THE PAY ITEM "PRESTRESSED DECK UNITS."

PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE ITEM "CLASS "A" CONCRETE."

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

NOTICE TO BRIDGE INSPECTORS	
THE DEPARTMENT'S BRIDGE SAFETY PROCEDURES REQUIRE THIS BRIDGE TO BE INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUALS FOR BRIDGE INSPECTION. ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS. (THE LISTING FOR COMPONENTS FOR SPECIFIC ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE IMPORTANCE OF INSPECTION OF ANY OTHER COMPONENT OF THE STRUCTURE.) THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE MANAGER OF BRIDGE SAFETY AND EVALUATION.	
COMPONENT OR DETAIL	STRUCTURE SHEET REFERENCE
NONE	NONE

ESTIMATED CONCRETE SLAB UNIT SHIPPING ENVELOPE AND WEIGHT			
LENGTH (FT)	HEIGHT (FT)	WIDTH (FT)	WEIGHT (LBS)
23'-5"	1'-0"	4'-0"	13,700
23'-5"	1'-0"	3'-0"	10,500

C.I.P. CONCRETE DISTRIBUTION		
SUBSTRUCTURE:	CY	45
*SUPERSTRUCTURE:	CY	15
TOTAL:	CY	60

*NOTE: SUPERSTRUCTURE INCLUDES CONCRETE SIDEWALKS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

PLOTTED DATE: 8/10/2015 3:49 PM

DESIGNER/DRAFTER: KA
CHECKED BY: JC
SCALE AS NOTED

ENGINEER:
AI Engineers, Inc.
919 MIDDLE STREET
MIDDLETOWN, CT 06457
FILENAME: 01 GENERAL PLAN AND ELEV.DWG

SIGNATURE/ BLOCK:

PROJECT TITLE:
REHABILITATION OF BRIDGE NO. 05850
OLD WHEELER LANE OVER ROARING BROOK

TOWN: AVON

DRAWING TITLE:
GENERAL PLAN, ELEVATION AND SECTION

PROJECT NO. 004-0131
DRAWING NO. S-01
SHEET NO.

SIGN LEGEND

Ⓐ ROAD CLOSED
1/2 MILE AHEAD
LOCAL TRAFFIC ONLY
80-9077

Ⓑ DETOUR
1000 FT
80-9806 **

Ⓒ DETOUR 80-9707
OLD WHEELER LANE 80-9928
51-2685

Ⓓ DETOUR 80-9707
OLD WHEELER LANE 80-9928
51-2626

Ⓔ DETOUR 80-9707
OLD WHEELER LANE 80-9928
51-2626(L)

Ⓕ END DETOUR
80-9708

Ⓖ ROAD CLOSED TO THRU TRAFFIC
80-9081

Ⓗ ROAD CLOSED
80-9080 *

Ⓘ STOP
31-0552 *

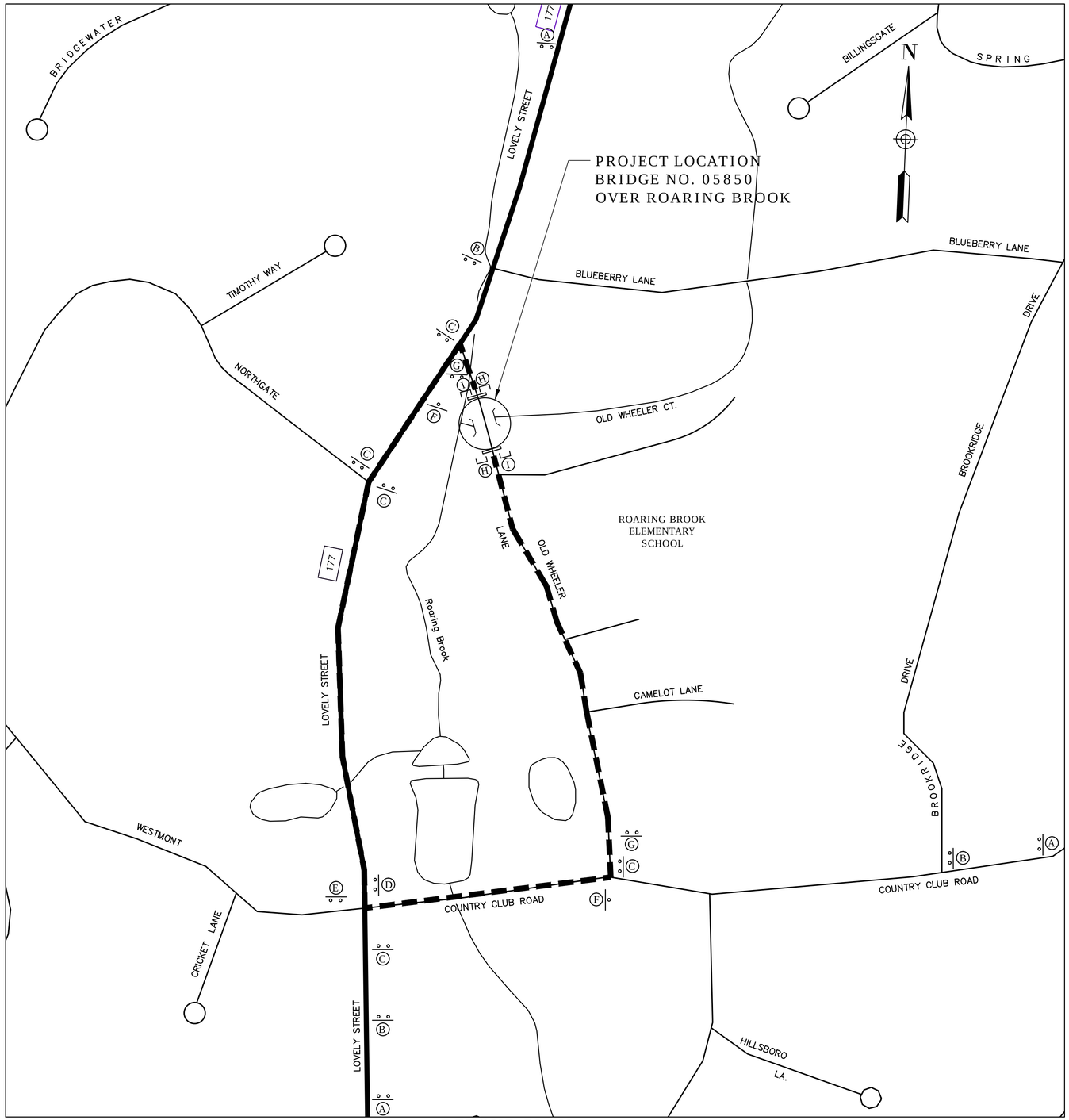
LEGEND

- DETOUR ROUTE
- CONSTRUCTION BARRICADE TYPE III WITH HIGH INTENSITY BARRICADE WARNING LIGHTS
- SINGLE POST MOUNTED SIGN
- DOUBLE POST MOUNTED SIGN
- Ⓐ SIGN
- * SIGNS TO BE MOUNTED ON CONSTRUCTION BARRICADE
- ** SIGNS TO HAVE BARRICADE WARNING LIGHTS - HIGH INTENSITY
- TEMPORARY PRECAST CONCRETE BARRIER CURB

DETOUR NOTES:

1. ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED WHEN THE DETOUR IS IN EFFECT. UPON COMPLETION OF THE DETOUR, ALL SIGNS SHALL BE UNCOVERED OR REINSTALLED IN THEIR ORIGINAL LOCATIONS. THIS WORK PAYABLE UNDER ITEM "MAINTENANCE AND PROTECTION OF TRAFFIC."
2. ALL SIGNS USED FOR CONSTRUCTION/DETOUR ACTIVITIES SHALL BE PAID FOR UNDER ITEM "CONSTRUCTION SIGNS (BRIGHT FLUORESCENT SHEETING).
3. ALL DETOUR SIGNS ARE TO BE POST MOUNTED WHEN FEASIBLE.
4. EXISTING SIGNS IN CONFLICT WITH TEMPORARY SIGNS SHALL BE COVERED, REMOVED OR REVISED TO MEET FIELD CONDITIONS.
5. THE LOCATIONS OF TEMPORARY SIGNS SHOWN ON THE PLAN ARE APPROXIMATE AND SHALL BE ADJUSTED BY THE CONTRACTOR TO MEET FIELD CONDITIONS.
6. SIGNS D AND E SHALL BE INSTALLED A MINIMUM OF 200 FEET BEFORE THE SIGNED TURN IS TO BE MADE.
7. THE CONTRACTOR SHALL NOTIFY THE TOWN OF AVON EMERGENCY SERVICES TWO WEEKS PRIOR TO INITIATING DETOUR. INSTALL STATIC SIGN NO. 80-9079 ON LOVELY STREET AND COUNTRY CLUB ROAD IN BOTH DIRECTIONS IN VICINITY OF BRIDGE TWO WEEKS PRIOR TO INITIATING DETOUR. THESE SIGNS SHALL BE REMOVED ONCE THE DETOUR IS IN EFFECT.

STARTING (___)
OLD WHEELER LANE
BRIDGE CLOSED OVER
ROARING BROOK
80-9079



DETOUR PLAN
SCALE: 1" = 200'

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

PLOTTED DATE: 8/10/2015 2:40 PM

DESIGNER/DRAFTER: EW/SK
CHECKED BY: SG
SCALE AS NOTED

ENGINEER: AI Engineers, Inc.
919 MIDDLE STREET
MIDDLETOWN, CT 06457
FILENAME: MPT-1 DETOUR PLAN.DWG

SIGNATURE/
BLOCK:

PROJECT TITLE:
REHABILITATION OF BRIDGE NO. 05850
OLD WHEELER LANE OVER ROARING BROOK

TOWN: AVON

DRAWING TITLE: DETOUR PLAN

PROJECT NO. 004-0131
DRAWING NO. MPT-1
SHEET NO.